REMARKS

Claims 3-11 are currently pending. Claims 1-2 are cancelled. Claims 3-10 are currently amended. Claim 11 is new.

Original claims 1-10 were rejected as unpatentable over Stam et al. (U.S. Patent No. 6,593,698) in view of Turnbull et al. (U.S. Patent No. 5,803,579).

Independent claims 4 and 9 have been amended to recite a vehicular lamp comprising a semiconductor light emitting element in which the current supplied to the light emitting element is based on both the speed of the vehicle and the temperature of the lamp. Amended claim 7 recites a vehicular lamp including semiconductor light emitting elements connected in parallel and a current controlling unit. The current controlling unit includes a selecting part for selecting all of the light emitting elements when the vehicle is above a predetermined speed and selecting only a part of the light emitting elements when the vehicle is below a predetermined speed. Additionally, the current controlling unit changes the current supplied to the selected part of the light emitting elements based on the speed of the vehicle.

An example of the features of claims 4 and 9 is discussed on page 12, lines 21-25 of the present application in which a current controlling unit 102 changes the supply current to a vehicular lamp 10 based on the speed of the vehicle and the temperature of the vehicular lamp 10. An example of the features of independent claim 7 is recited on page 42, lines 25-31 in which a current setting part 212 selects all of a plurality of light emitting diodes 100a to 100c if the vehicle speed is "higher than or equal to a predetermined level" and only part of the light emitting diodes 100a if the vehicle speed is "lower than the predetermined level."

As an example, the vehicular lamp 10, a vehicular headlamp, emits light forward from the vehicle (pg. 5, lines 11-12). Accordingly, the vehicular lamp emits a significant quantity of light which may result in a considerable temperature increase in the lamp chamber and thus the light emitting element may not emit light properly (pg. 1, lines 25-26). Therefore, the purpose of the above features is to control the current supplied to the light emitting elements so that light may be emitted properly.

The cited references, however, do not disclose or suggest the features of independent claims 4, 7 and 9.

For example, the Stam et al. patent discloses a continuously variable headlamp 22 controlled by a headlamp controller 76, which gradually modifies the illumination range 24 of light 78 leaving the headlamp 22 (col. 7, lines 62-67, col. 8, lines 17-18) for the purpose of *preventing excessive glare* (col. 3, lines 57-61). Additionally, a light sensor or an imaging system 42 may be used to determine ambient light levels. When the ambient light level is greater than a day threshold, the headlamps are set to a daylight mode (col. 9, lines 6-10). Additionally, the Stam et al. patent discloses that other methods are available in which illumination range is increased in proportion to increasing vehicle speed (col. 2, lines 29-30). The Stam et al. patent does not disclose, however, that the variable headlamp 22 is "a semiconductor light emitting element" or that current supplied to the headlamp 22 is based on the temperature of the headlamp 22 as recited in pending claims 4 and 9.

The Turnbull et al. patent discloses an illuminator assembly 10, which includes LEDs 14 (col. 10, lines 59-65) that may be used in automotive applications. The current supplied to the LEDs may be varied depending on temperature to prevent overloading of the LEDs (col. 31, lines 33-36). The Turnbull et al. patent does not disclose or suggest that the current supplied to the LEDs may be based on the speed of the vehicle.

However, the Office action alleges it would have been obvious to one of ordinary skill in the art to modify the Stam et al. patent by incorporating the LEDs and temperature dependent current as taught by the Turnbull et al. patent in order to obtain the present claims (pg. 3, Office action). Applicant respectfully disagrees.

Although the Stam et al. patent discloses that the intensity of light can be changed in proportion to increasing vehicle speed (col. 2, lines 29-30), the patent clearly indicates that the purpose of changing light intensity is to prevent "*excessive glare* seen by drivers in front of the headlamps" (col. 1, lines 24-26). The Stam et al. patent does not disclose or suggest, though, that excessive glare may be due to the temperature of headlamp 22 or that excessive glare can be

prevented by changing the headlamp current based on the headlamp temperature. Therefore, it would not have been obvious nor would there have been motivation for one of ordinary skill in the art to provide the additional feature of changing the current supplied to the headlamps 22 based on the headlamp temperature.

Furthermore, even though the Turnbull et al. patent discloses an LED current drive dependent on temperature, this patent indicates the purpose is to prevent the overloading of the LEDs (col. 31, lines 33-36). It does not, however, disclose or suggest to reduce the LED current based on a speed of the vehicle for the purpose of preventing an overload of the LEDs or to reduce the current based on speed for any other purpose. Therefore, there would have been no motivation for a person of ordinary skill in the art to combine the patent of Stam et al. with Turnbull et al. so that current supplied to a semiconductor light emitting element is based on both the speed of the vehicle and the temperature of a vehicular lamp.

The Gloodt et al. patent discloses a wheel lighting assembly 10 comprising LED light sources 12, a sensor 66 adapted to measure the rate of revolution of the wheel and a microprocessor that varies the pulsation rate of the light sources 12 (par. 0019, 0023). The Gloodt et al. reference does not, however, disclose or suggest the features missing from either the Stam et al. or Turnbull et al. patents.

At least for the foregoing reasons, independent claims 4 and 9 should be allowed.

Claims 3, 5-6 and 8-11 depend from these claims and should be allowed for at least the same reasons.

In regards to independent claim 7, the Office action alleges that it would have been obvious to one of ordinary skill in the art to increase visibility at high speeds by activating additional LEDs as recited in present claim 7 (page 4, Office action) to the Stam et al. and Turnbull et al. patents. Applicant respectfully disagrees. Stam et al. discloses various methods for changing illumination intensity that include varying the duty-cycle of the headlamp (col. 1,

line 35), using high intensity discharge headlamps (col. 1, line 48), using an attenuation filter (col. 1, line 53) and changing the headlamp direction (col. 1, line 60). However, neither Stam et al. nor Turnbull et al., in any way, disclose or suggest that illumination intensity can be modified by activating additional LEDs. Therefore, there would have been no motivation nor would it have been obvious to one of ordinary skill in the art to modify the references of Stam et al. and Turnbull et al. in order to obtain the subject matter of claim 7.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Respectfully submitted,

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